(11) Application No. AU 199743839 B2 (12) PATENT (10) Patent No. 730992 (19) AUSTRALIAN PATENT OFFICE (54)Liquid compositions comprising stability enhancing surfactants and a method of enhancing low temperature stability thereof $(51)^{7}$ International Patent Classification(s) A61K 007/50 Application No: 199743839 (22)(21) Application Date: 1997.09.04 (87) WIPO No: WO98/13022 (30)**Priority Data** (33) Country (31)Number (32) Date 60/026652 1996.09.24 US 60/026650 1996.09.24 US **Publication Date:** 1998.05.29 (43)(43)Publication Journal Date: 1998.07.23 (44)Accepted Journal Date: 2001.03.22 (71)Applicant(s) Unilever PLC (72)Inventor(s) Sudhakar Puvvada; Richard Kolodziej; May Shana'a (74)Agent/Attorney DAVIES COLLISON CAVE, GPO Box 3876, SYDNEY NSW 2001 (56)Related Art US 5409640 AU 67373/96 US 5478490

The Claims defining the invention are as follows:

- A lamellar structured liquid cleansing composition comprising 5% to 50% of a surfactant system comprising:
 - a) anionic or mixture of anionic surfactants; and
 - b) an amphoteric and/or zwitterionic surfactant or mixture thereof;

wherein alkalimetal alkylamphoacetate comprises 25% to 90% of component (b); and

c) a structurant selected from liquid fatty acids comprising oleic acid, isostearic acid, linoleic acid, ricinoleic acid, elaidic acid, arichodonic acid, myristoleic acid, palmitoleic acid and mixtures thereof, or

polyalkylene glycol fatty acid esters comprising propylene glycol isostearate, propylene glycol oleate, glyceryl isostearate, glyceryl oleate, polyglyceryl diisostearate, and mixtures thereof.

- 2. A composition according to Claim 1 wherein alkalimetal alkylamphoacetate comprises 30 to 90% of component (b).
- 3. A composition according to Claim 2, wherein alkalimetal alkylamphoacetate comprises 40% to 90% of components (b).
- 4. A composition according to Claim 1, wherein the anionic surfactant is selected from the group consisting of alkyl sulfates, acyl isethionates and mixtures thereof.
- 5. A composition according to Claim 1, wherein component(b) comprises 0.1% to 25% betaine.



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- 6. A composition according to Claim 1, wherein the composition additionally comprises 0% to 10% of nonionic surfactant.
- 7. A method of enhancing low temperature stability of a lamellar structured cleansing composition as claimed in Claim 1 wherein said method comprises selecting the amphoteric and/or zwitterionic surfactant component(b) such that alkalimetal alkyl amphoacetate comprises 25% to 90% of component (b).
 - 8. A method according to Claim 7, wherein alkalimetal alkylamphoacetate comprises 30% to 90% of component (b).
- 9. A method according to Claim 8, wherein alkali metal alkylamphoacetate comprises 40% to 90% of component (b).
 - 10. A method according to any one of Claims 7 to 9 wherein the lamellar structured liquid cleansing composition comprises one or more of the components of Claims 4 to 6.
 - 11. A composition as hereinbefore described with reference to the examples.

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UNILEVER PLC

By Its Patent Attorneys
DAVIES COLLISON CAVE

